STANDARDS OF DIABETIC FOOT CARE

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U.S. PHS Indian Health Service
Aberdeen Area
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This pamphlet has been adapted from a similar pamphlet prepared by Sara K. Dye, MD; Zela Henderson, RPT; Dorothy Jones, RN, CDE; of the IHS Oklahoma Area. Contributing authors to this booklet have been Verna J. Schaad, RN, MS, CNP, Dorothy Vershure, RPH, Frances Stracqualursi, BSN, CDE, William Bailey, DDS, Fred Ness, M.D, and Harlon Compton, C.Ped.

INTRODUCTION

It is well documented that the occurrence of diabetes among certain Native American Tribes far exceeds that of the general population. In the Aberdeen Area IHS it is estimated that more than one in three Native Americans has diabetes by 45 years of age. Fifteen percent of all people with diabetes will develop a foot ulcer at some time in their lives. These lesions often become infected and result in amputation. **(1)** Within the Aberdeen Area Indian Health Service (AAIHS), approximately 84 percent of all amputations are performed on persons with diabetes. Patients with diabetes in the AAIHS are 1 1/2 times as likely to have a amputation as in the U.S. all races.

The Standards of Diabetic Foot Care were developed by the IHS Aberdeen Area Office and Diabetes Control Program as an attempt to unify the care of foot problems in the Aberdeen Area. They are patterned after a similar set of standards developed at the Carl Albert Indian Health Facility(CAIHF), Ada, Oklahoma by Dr. Sara Dye et.al in 1990.

It has been estimated that 50-75 percent of all amputations could have been prevented with proper foot care and early medical intervention. The goals of the Foot Care Standards are to provide a consistent approach to foot care education, screening, evaluation, and treatment. This document is by no means comprehensive, however, it does represent the minimal standards of care which are within the scope of each IHS facility. They also represent a multi-disciplinary approach to the prevention and salvage of the diabetic foot, utilizing reasonable and attainable resources.

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STANDARDS OF DIABETIC FOOT CARE
ABERDEEN AREA INDIAN HEALTH SERVICE

I. All persons with diabetes will have a **yearly** foot care education session in conjunction with a complete foot exam.

II. Every patient with diabetes will have a comprehensive foot examination **at least yearly** and more often if warranted. The examination will include overall inspection, history of prior ulceration, identification of foot deformities, assessment of pedal pulses, assessment of sensory status, and assignment of risk categories as detailed below.

III. All patients with diabetes will be given a footwear education session annually as part of the footcare education session and annual exam.

IV. Patients with high risk feet will have a custom molded orthotic insole.

V. Patients with diabetes who are in need of toenail and callus care of the feet will be routinely provided that care by a provider that is licensed or has taken training in diabetic nail and/or callus care.*****

VI. All patients with diabetes will have their shoes and socks removed at each diabetes clinic visit for a thorough visual foot inspection.

VII. A toenail will not be removed from a patient with diabetes without at least minimal assessment and documentation of vascular status.

VIII. The Diabetes Control Coordinator of all operating units will survey and report the occurrence of all lower extremity amputations to the Diabetes Control Officer quarterly. The reporting form is found in Appendix J.

***** These providers will include but not be limited to those licensed as podiatrists, physicians, physicians assistants (PA), nurse practitioners (N.P.), physical therapists (PT) or nurses (registered or licensed).

I. EDUCATING THE PATIENT

Of all the possible approaches to saving the diabetic foot, the most important by far, is educating the patient(2). All the existing medical knowledge regarding the care and treatment of the diabetic foot becomes less beneficial if the patient is unable to recognize the need for early medical intervention, and/or the ability to participate in preventative care.

The guidelines for patient education in regards to foot care should include the following:

1. **Explanation:** The role of diabetes in the development of foot problems should be explained to each patient. Emphasis should be placed on the need for consistent metabolic control of blood sugar and blood pressure to prevent disease progression and on the role of sensation loss, deformity, and vascular disease in foot problems.

2. **Specific Instructions:** Explicit guidelines regarding foot care should be given to each patient. These instructions should also include guidelines regarding proper shoe selection. See Appendix A.

3. **Reinforcement:** It is crucial that the patient hears the same instructions from ALL care providers. All verbal instructions should be accompanied with written instructions as well.

4. **Individualization:** It has been shown in studies by Edmond(3), and the CAIHF Foot Clinic(4) that the patient's compliance with educational efforts are greatly enhanced when hands on care is provided, which identifies their individual foot care problems. The foot exam provides a teachable moment.

5. **Documentation:** It is important that all instructions provided to the patient are appropriately recorded.

Education is the responsibility of all health care providers who come in contact with the patient. Several forums may be utilized to provide foot care instructions to the patient. However, the most effective approach, which we have found, includes utilizing a diabetic foot clinic for evaluation, education, and treatment.

II. EVALUATING THE FEET

The most crucial intervention to detect and/or prevent limb loss is early detection. EVERY patient with diabetes should have a comprehensive examination of his or her feet **at least once a year**, and more often if warranted. Between the comprehensive or yearly evaluations, an inspection of the patient's feet should be done and documented on EVERY diabetes clinic visit.

The comprehensive foot exam should include:

1. Overall INSPECTION of the feet especially between the toes with identification of the following:

    a. Hygiene
    b. Toe nail condition (i.e. hypertrophied nails)
    c. Skin condition (i.e. dryness, cracking)
    d. Swelling and/or temperature changes
    e. Redness of toes/feet, dependent rubor
    f. Location of calluses, corns, blisters
    g. Location of pre-ulcerative sites
    h. Location, size and depth of ulcers

2. History of **PRIOR ULCERATION.**

3. Identification of **FOOT DEFORMITIES.**

4. Assessment of **PEDAL PULSES**.

5. Assessment of **SENSORY PERCEPTION**.
    Sensory perception is tested using the calibrated Semmes-Weinstein monofilaments. A passing score is the perception of the ten gram or 5.07 monofilament when applied to the areas on the foot as diagramed. As an early indicator of sensory loss, vibratory perceptions may be tested, as well.

6. Assessment of **RISK CATEGORY**.
    See Appendix B for the assessment tool used for the comprehensive foot screening. "Low Risk Feet" are to have annual comprehensive foot examinations. "High Risk Feet" are to have a comprehensive foot examination more often. See Appendix G. The signs and symptoms of peripheral neuropathy and peripheral vascular disease (PVD) of the Lower extremity are outlined in Appendix C and D respectively.

III. DIABETIC FOOT WEAR

One of the major first line defenses in protecting the diabetic foot is appropriate footwear. Management protocols, which fail to address this issue, are inappropriate. The condition of the foot will determine the type of shoes selected. For the uncomplicated foot, a properly fitting shoe may by adequat**e** (5) Sec. Appendix F.

The insensitive or deformed diabetic foot will most likely require prescription footwear(6,7)The special features available in prescription shoes are varied , as are the custom modifications, which can be made (8,9,10). Selection of the most appropriate shoe will be based upon the current condition of the foot, as well as the history or risk or ulceration(11). Sec Appendix G.

To ensure the best shoe is selected the patient should be referred to a health care provider familiar with prescription shoes. Generally members of the Pedorthic Footwear Association (PFA) will have the necessary knowledge for proper shoe fitting(12) . Requesting a list of members of PFA may be helpful in locating qualified persons in your area. You may request a listing of PFA members by writing to:

Pedorthic Footwear Association
9861 Broken Land Parkway, Suite 255
Columbia, Maryland 21046-1151

Now that Medicare and Medicaid will pay for therapeutic shoes for patients with diabetes, we may feel like our troubles are over in getting people into proper footwear for their diabetic feet. However many people with diabetes will choose not to wear therapeutic footwear; because of the "ugliness" of therapeutic footwear or that they can't find it in the styles that feel comfortable to them. Many people with diabetes prefer to buy a particular shoe from the retail market because that is what they like.

We as health care providers working with patients with diabetes need to adapt to the demands of our patients and help them to find the footwear that they want. Actually a large number of perfectly suitable shoes for patients with diabetes are available on the commercial market, if only we are able to guide people to those styles that are appropriate for their foot shape need.

The first step in this endeavor of course is to educate us as to what are the qualities of a good fitting shoe. A good fitting shoe for people with diabetes has a number of inherently important qualities. These are detailed in our handout on footwear for diabetic feet.

Knowing what constitutes appropriate footwear for people with diabetes comes first. The next step is to survey the shoe stores in your area. It might help to ask your patients where they buy their footwear and what type they prefer. If they need to wear cowboy boots for example you should guide them to something with a lower heel and a rounder toe box. If they are in a work situation that might endanger their feet you should encourage them to use steel toe footwear. As stated earlier there are a wide variety of shoes available to meet patients footwear needs.

We have found that shoe store owners and managers were very often quite happy to cooperate with us.

IV. ORTHOTICS

Special shoes alone may not be enough to meet the patient's needs. In addition total contact, multiple density, removable inlay that is directly molded to the patients foot, or orthotic may be required.

In general, orthotics are indicated when the patient has:

1. Sensory loss
2. History of ulceration
3. Foot deformity
4. Gait abnormality
5. Foot pain (chronic)

The major functions of foot orthotics (13,14,15,16) are:

1. Shock absorption
2. Correction of accommodation of abnormal foot motions
3. Dispersion of plantar pressures

Foot orthotics are categorized as "functional" or "accommodative" based on the goal of the device (17,18). The functional orthotic supports the foot in the position most desirable for weight bearing and gait. The accommodative device makes limited attempt to control the motion of the foot or ankle (19). The objectives in the use of the accommodative orthotic in the management of the diabetic foot are clear. 1) Accommodate fixed deformities, 2) to restrict or control unstable or painful joint motions. 3) to relieve or transfer pressure, and 4) to improve gait patterns. The type of orthotic selected is based on the condition of the foot. See Appendix G.

The footwear used with the orthotic is CRITICAL. Placing the orthotic in footwear that is not designed to accommodate the additional thickness of the orthotic may create serious foot problems (20). The patient fitted with orthotics and extra depth footwear should be monitored to ensure that the interfacing of feet, orthotic, and footwear are working in harmony to maintain health foot protection and ambulating.

V. ROUTINE CARE OF THE DIABETIC FOOT

TREATING THE NONULCERATED FOOT

I. Nail Care

A. Care Provided

1. Cut nails straight across. Be sure to smooth any rough or sharp edges.

2. Thick raised nails. Sand as thin as possible (using the DREMEL hand drill).

3. Ingrown toenails. Referral for evaluation. Removal should NEVER be performed without an adequate vascular evaluation of the lower extremities.

   Note: If unable to remove the nail, due to vascular insufficiency, etc., trimming away of the affected portion should be performed on a routine basis.

4. Explain rationale for procedures performed to patient.

B. Rationale/Purpose

Discourages growth of ingrown toenails. Smoothing rough edges prevents nails from rubbing or puncturing adjacent toes or otherwise placing undue pressure on toes.

II. Dry Foot

A. Care Provided

Should be lubricated daily after bathing and drying the feet. An emollient cream can be used. Do not put cream between toes.

B. Rationale/Purpose

Cracked dry feet allow the skin integrity to be broken and may serve as a nidus for infection. Cream between toes encourages fungal growth and infection.

III. Calluses, Plantar Foot

A. Care Provided

1. Must be trimmed and sanded frequently.

2. If severe, refer for orthotic evaluation.

3. Teach sensate patients appropriate use of pumice stone or emery board and explain dangers of callused feet.

B. Rationale/Purpose

Calluses act as foreign bodies which if left untreated may obscure or cause underlying pathology (i.e., bacteria growth-abscess-ulceration)(21).

IV. **Calluses, Dorsal and Lateral Foot**

A. Care Provided

1. Area must be trimmed/sanded.
2. Use toe covers, bunion shields, etc., as protective devices to prevent rubbing inside of shoes.
3. Assess appropriateness and fit of footwear.
4. Teach patients appropriate use of pumice stone or emery board.

B. Rationale/Purpose

Calluses and bunions can place excessive pressure on the foot and act as a foreign body in the shoe.

V. **Thickened, Callused Heel Area**

A. Care Provided

1. Area must be trimmed/sanded.
2. Teach patient proper daily lubrication of feet.
3. Teach patients appropriate use of pumice stone or emery board.

B. Rationale/Purpose

Cracking or fissuring in the heels of the feet are sites for bacteria growth.

VI. **Overlapping Toes**

A. Care Provided

1. Instruct patients in daily wearing of cotton balls or foam toe separators on the affected digits.
2. Assess shoes for appropriate depth/width to prevent rubbing. May require special extra depth shoes.

B. Rationale/Purpose

Overlapping toes may create pressures on the other toes as well as rub against the shoe, creating blisters, ulcers, or callused areas.

VI. TREATMENT OF THE PROBLEMATIC DIABETIC FOOT

Clinical Presentation	Hospital Admission	Wound (*)Culture	Surgical Care	Noninvasive (+)Vascular Testing	(X)Antibiotic	Restricted Weight Bearing (NO) (YES)	Healing Shoe
Cellulitis -	+	ž If wound present	Usually not indicated [No Foot Soaks]	ž baseline		+	
Penetrating Ulcer:					Clindamycin [Cleocin] plus Gentamicin-per		
Superficial +	ž	+	Debridement (PRN) [No Foot Soaks]	+	weight and renal function. Unasyn [Ampicillin-Sulbactam] or Ceftizoxime	+	
Deep - (see table 3)	+	+	Debridement [No Foot soaks]	+	[Cefizox]	+	
"Fetid Foot" Gangrene	+	+	Surgical Treatment Mandatory	+	[Same as penetrating ulcer]	+ -	

(*) Aerobic and anaerobic organisms must be cultured properly. Surface debridement followed by some form of curettage must accurately represent the mixture of pathogens.

(+) To ascertain the presence of vascular disease vs. neuropathy as well as determine the level of amputation, if required.

(X) Polymicrobial pathogens
Bacteriodes fragilis
Peptococcus
Proteus mirabilis
Enterococci
Staphylococcus aureus
Clostridia
E. Coli
Klebsiella

VII. CONCEPTS OF DM FOOT INFECTIONS

1. Provide aggressive therapy initially because it may prevent progression to a complicated wound. Medications should be administered in high doses to ensure adequate concentrations at the site of infection particularly in the presence of vascular insufficiency.

2. Do not use fluoroquinolones as a single agent because of poor anerobic and gram positive coverage. If used, use a daily dose of ciprofloxacin 750-1000mg. Only bacteriocidal antibiotics should be used.

3. Gram negative bacteria are more prevalent with chronic infections.

4. Expansion of initial therapy to treat resistant cultured isolates is not required if the infection is responding to treatment.

5. If a wound is not healing the antibiotic should be changed according to the culture results.

6. An empirical regimen that is unnecessarily broad, given the culture results, can be simplified if the infection has responded to treatment.

7. The deeper the tissue sampled for culture, the better the specimen will be in terms of representing the true pathogenic organisms.

8. Mixed infections are common. The most important etiologic organisms in DM foot infections are probably Streptococci species, Staphylococcus aureus, anerobes and some gram negative organisms.

9. Gas in soft tissue of diabetics does not always signify true gas gangrene, i.e., an infection caused by Clostridium Perfringens. Other causative organisms include gram positive cocci such as streptococcus and especially enterococcus or mixed enteric gram-negative rods. A gram stain may be helpful prior to treatment.

10. Gentamicin, ciprofloxacin, timentin, and ceftazidime are some of the few drugs effective against pseudomonas aeruginosa in diabetic foot infections.

VIII. ANTIBIOTIC TREATMENT OF DIABETIC FOOT INFECTION

MILD INFECTION
Non-limb Threatening Outpatient

RECOMMENDED RX	**ALTERNATIVE RX**
Cephalexin 500mg p.o. QID OR Clindamycin 300mg p.o. QID	Dicloxacillin 500mg p.o. QID OR Erythromycin 500mg p.o. QID OR Augmentin 500mg p.o. Q8HRS Metronidazole 500mg p.o. Q6HRS for anerobic coverage

MODERATE INFECTION
Non-limb Threatening Inpatient

RECOMMENDED RX	**PATIENT REFUSES ADMISSION**
Cefazolin 2mg I.V. Q6HRS PLUS Metronidazole 500mg p.o. Q6HRS OR Clindamycin 600-900mg IV Q8HRS	Clindamycin 300mg p.o. QID PLUS Ciprofloxacin 750-1000mg p.o. BID OR Ceftriaxone 2mg IV daily PLUS Metronidazole 500mg p.o. Q6-8HRS

ANTIBIOTIC TREATMENT OF DIABETIC FOOT INFECTIONS (cont.)

SEVERE INFECTION
(Treatment should be based on reliable culture of wound)

Limb Threatening Inpatient

RECOMMENDED RX

Clindamycin 600-900mg IV Q8-12HRS
(1,200-2,700mg/d)
and Gentamicin IV Q8HRS
(monitor kidney functions &
Gentamicin levels)
OR
Cefotaxime 2 gm IV Q8HRS &
Metronidazole 500 mg p.o. Q6-8HRS

ALTERNATIVE RX

Ampicillin 2 gm with
sulbactam 1 gm Q6HRS
(may add Ciprofloxin 750-1000mg
p.o.to cover gram negative bacteria)

Life Threatening Inpatient

RECOMMENDED RX

Cefotetan 2 mg IV Q12HR
OR
Cefotaxime 2 mg IV Q8HRS &
Metronidazole 500mg p.o. Q6-8HRS
OR
Clindamycin 600-900mg IV Q8HRS
AND
Gentamicin IV Q8HRS (Monitor kidney function & Gentamicin levels)
AND
Ampicillin 1 gm Q6HRS

IX. OTHER DIABETIC FOOT CONDITIONS

FOOT CONDITIONS	TREATMENT
1. <u>Mal Perforants Ulcer:</u>	Assess depth, clinically and radiographically to determine tendon-bone or joint involvement.
a. If only skin and subcutaneous tissues involved	a. Ulcer will usually heal with local wound care, no weight bearing.
b. If underlying joint involved.	b. Ray amputation, removing the toe and the head of the related metatarsal
c. If more than one ulcer is present in the distal foot	c. Transmetatarsal amputation may give acceptable results.
2. Sinus Tract	Must be unroofed completely. All necrotic tissue including bone should be removed.
3. Necrotizing Skin and Soft Tissue Infections	Should be treated with parenteral antibiotics and prompt surgical drainage and debridement.

IX. OTHER DIABETIC FOOT CONDITIONS

FOOT CONDITION	TREATMENT
4. Charcol Joint	Indicative of advanced neuropathy, septic arthtitis or Osteomyelitis. Treat conditions accordingly.

"Use of astringents including full strength solutions, enzymatic debriding agents, heat or hot soaks in any form, and whirlpools **ARE TO BE AVOIDED.**" (22)

Ischemic Ulcers	vs	Neuropathic Ulcers (23)
- History of progressive intermittent claudication - Painful ulcers usually on toes		- Painless - Found on ball of the foot over the metatarsal heads Or on the plantar aspect

X. NONINVASIVE VASCULAR EXAMINATION OF THE LOWER EXTREMITY

In the diabetic patient it is common to find significant PVD prior to the age of 45(24) which may lead to severe ischemia and end in loss of limb. Noninvasive vascular (NIV) studies of the lower extremity are extremely useful in identifying arterial occlusive disease, quantitating the severity of ischemia, determining the location of the occlusive process, ruling out vasculogenic claudication, determining ulcer healing potential, as well as selection of the proper amputation level(25).

Referral criteria for NIV studies of the lower extremity may include:

1. Newly diagnosed diabetic patients for baseline profile.
2. Patient with neuropathy, peripheral vascular disease, foot deformities, or a history of foot ulcers or active ulcers particularly if they heal slowly.
3. Diabetic patients over 40 years of age or patients who have had diabetes for more than 10 years.
4. Signs and symptoms of Peripheral Vascular Disease. See Appendix D.
   In order for the information obtained from NIV studies to have significant diagnostic value they should include:

1. Segmental waveforms of the lower extremity. Waveforms should be taken over the thigh, calf, ankle, forefoot, and great toe of each extremity. Segmental pulse volume recordings (PVR) are preferred over doppler velocity waveforms due to their qualitative ability. They are "reproducible, not limited by arterial mural calcification and capable of localizing arterial occlusive lesions with considerable accuracy(26)." In Dr. Dye's experience diagnosis and location of the lesion is very accurate, greater than 95%, as corroborated by arteriogram.

2. Segmental Systolic pressures. Segmental pressures should be taken over the thigh, calf, ankle, forefoot, and great toe of each lower extremity.

3. Treadmill evaluation. This is used to rule out vasculogenic claudication, if symptoms indicate. Treadmill testing is preferred over other methods because it produces maximal stress, it is effective in detecting small hemodynamic changes as well as duplication of patients symptoms and it may possibly identify cardiopulmonary disabilities which may be the more limiting aspect than the limb ischemia itself(27).

The use of ankle-brachial indexes (ABI) as the sole indicator for the presence of ischemic disease without a complete lower extremity NIV study, should be discouraged. From the studies performed in the CAIHF-NIV and numerous other sources, diabetic patients are subject to have abnormally elevated ABI's due to calcified vessels. See Appendix H for indications of various NIV studies.

XI. **NURSING STANDARDS OF CARE - DIABETIC FOOT CARE**

OUTCOME STANDARDS:

1. Feet will be inspected at each visit to the clinic and on admission to the health care facility.
2. During discussion, patient will express understanding of disease process which influences important aspects of diabetic foot care, such as microvascular and nerve changes.

NURSING INTERVENTIONS:

Assessment:

Inspect skin for irritation, cracking, lesions, corns, calluses, deformities, or edema
Inspect between toes
Inspect shoes for proper fit
Monitor hydration level of feet
Monitor for arterial insufficiency in lower legs (check pulses, etc.)
Monitor legs and feet for edema
Monitor patient's gait and weight distribution on feet
Monitor cleanliness and general condition of shoes and stocking of patient's
Measure sensation using monofilament nylon probes

Intervention:

Bathe foot (no longer than 5-10 minutes) as needed
Use superfatted soap (i.e., Dove, Jergens) containing tallow, oils or emollients, avoid perfumed or deodorant soaps which can dry skin (i.e. Dial, Irish Spring)
Dry carefully between toes
Apply lubricating lotion (such as eucerin cream, urea cream, or Nivea cream)
Clean nails
If properly trained cut normal thickness nails when soft, using a toenail clipper, using the curve of the toe as guide

Education:

Assess patient educational needs using form such as IHS-504 (see appendix J)
Offer positive feedback about self-care foot activities
Discuss foot care with patient as exam and procedures are done
Instruct patient/family on the importance of foot care
Teach patient and family that any break in skin or skin structure represents a potential emergency and requires prompt medical attention
Instruct patient to monitor temperature of feet using back of hand
Instruct patient on the importance of inspection when sensation is diminished
Offer positive feedback about self-care foot activities
Teach about disease process related to diabetic foot pathology
Appraise patient's current level of knowledge of diabetes effect on feet (using form such as IHS-525) (see appendix K)

Explain pathophysiology of disease and how it relates to foot anatomy and circulatory and nerve physiology as appropriate
Provide information to patient about present condition as appropriate
Avoid empty reassurances
Provide family/significant other with information about patient's progress as appropriate
Discuss lifestyle changes required to prevent future complications and/or control disease process
Describe rationale for management/therapy/treatment recommendations
Explain possible signs/symptoms to report to health care provider
Reinforce information provided by other health care team members
Encourage weight reduction, smoking cessation, appropriate shoe selection, avoidance of excessive alcohol intake and following an appropriate, safe activity/exercise program

Referral:

Refer to podiatrist, foot clinic, or trained health care professional for trimming of thickened nail unless nurse has received training in trimming nails
Refer to certified diabetes educator, if available

XII. PERFORMANCE IMPROVEMENT PLAN

Throughout this document, minimal standards of care have been identified. Utilizing the quality assurance process with these standards would be most effective in evaluating the foot care provided to the diabetic patient. Evaluation of care may be performed concurrently or retrospectively.

Each standard may become an "indicator/criteria" which in some way measures compliance to an element that is considered necessary to the provision of quality care to the patient. For example:

Standard:	Evaluating the feet
Criteria:	At least annually, there is documentation re:
	1) results of foot examination
	2) history of prior ulceration

Frequent (every other month or quarterly) analysis of results may assist in providing focus to areas that require correction or improvement. The next page is an example of a performance improvement tracking report.

XII. (cont'd) PERFORMANCE IMPROVEMENT REPORT

Department: Diabetic Foot Clinic Month: *Frequency

Program/Director

Note: Findings will be reported monthly until follow-up/resolution is completed.

Date - Data	Assessment Findings	Data - Action	Date	Follow-up/Resolution

1. MONITORS/INDICATORS (results of monitoring activities during frequency period)

1. EDUCATION
   a. Documentation
      (at least every _____) #charts reviewed — Action and follow-up required only when threshold
      threshold: 5% #media criteria — value exceeded

2. EVALUATION OF FEET
   a. Inspection #charts reviewed
      annually meet criteria
      threshold: 5%
      (to include description of items on page 3)

3. NONINVASIVE VASCULAR EXAM
   a. Indications (ref. p4)
      threshold: 100%
      etc., etc., etc....

4. TREATMENT
1. Non-ulcerated foot
   a. nail care - referral
      ingrown toenail

   b. education
      etc., etc.

Date sent to QA Coordinator: Submitted by:

APPENDICES

Appendix A: Patient Educational Handout

TAKING CARE OF YOUR FEET

Do's for Persons with Diabetes:

A. Wash feet daily. ALWAYS dry carefully between toes.
B. Lotion feet daily, DO NOT put lotion between toes.
C. Keep feet warm and dry.
D. Look at your feet daily for cuts, blisters, and scratches, especially between the toes.
E. Cut toenails straight across.
F. Wear loose-fitting socks to bed if feet are cold, never use hot packs or hot water bottles.
G. Wear comfortable, well-fitting shoes.
H. Check the inside of your shoes for foreign objects and torn linings, regularly.

Don'ts for Persons with Diabetes:

A. Don't soak your feet, especially if you have a sore on them.
B. Don't walk barefoot, even indoors!
C. Don't smoke. Smoking reduces blood circulation in diabetics, this can lead to the loss of a foot or leg.
D. Don't cut corns or calluses yourself.
E. Don't cut your toenails down in the corners, this causes ingrown toenails.
F. Don't use chemical agents or any other irritants for the removal of corns and calluses.
G. Avoid open-toed shoes, particularly sandals with thongs between the toes.

When to Come to the Doctor:

Come see the Doctor **IMMEDIATELY** if any of the following occurs:

A. lngrown toenails.
B. Athlete's foot (cracking and peeling between the toes or on the bottom of the foot) .
C. Cuts, discoloration, sores that show no sign of healing. Never wait to come see the doctor when you have foot problems.
D. Pain in the feet or calves.

REMEMBER TO INFORM EVERY DOCTOR YOU VISIT THAT YOU ARE A DIABETIC

Modified from "A Step In The Right Direction" a publication by Hoecst-Roussel Pharmaceuticals, Inc.

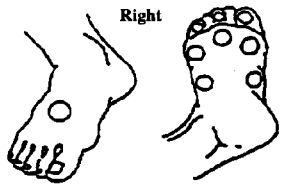
Appendix B
DIABETIC FOOT ASSESSMENT FORM

Appendix B
DIABETIC FOOT ASSESSMENT FORM

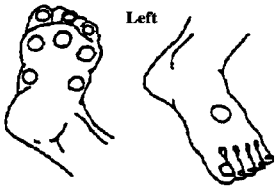
Neurological Assessment_____

Date	Examiner	I. Risk Category R	I. Risk Category L	II.Deformities R	II.Deformities L

Right



Left



Date	III. Foot Pulses Dorsalis Pedis R	Dorsalis Pedis L	Posterior Tibial R	Posterior Tibial L

(5.07 Monofliment)
+=Positive Sensation
-=Negative

Draw in:
Callus

Ulcer **Note: width/depth in cm.**

Skin: Red (R)
Swelling (S)
Dryness/cracking (1)

Toenails: Thick (T)
Ingrown (I)

Fill in blanks with an "R", "L" or "B" to indicate positive findings on the Right, Left or both feet.

1. **History of Foot Ulcers?** **Yes**_____ **No**_____
2. **Ever Hospitalized for Foot Ulcers?** **Yes**_____ **No**_____
3. **Previous amputations?** **Yes**_____ **No**_____
   Location:_____
4. **Previous Vascular studies?** **Yes**_____
5. **Onset-Diabetes** _____**(Years)**

Comments: _____

Modified from: National Hansen's Disease Center
"Foot Screening Form" Carville, Louisiana

Appendix B(cont.)

I. Risks Catergory (Modified)

0- No sensory loss
0A-No sensory loss/vascular changes
1- Sensory loss

1A-Sensory loss + vascular changes
1B-Sensory loss & deformities and/or high pressure sites
2-Sensory loss +Hx of ulceration
3-Sensory loss, Hx of ulceration and deformity
4-Charcot foot

II.Deformities

0-None
1-Hammer/clawtoe
2- Bony prominence

3- Rigid great toe
4- Equinus
5- Foot drop
6- Partial foot resection
7- Complete foot amputation

III. Foot Pulses

Palpable
0-Absent
1-present
If unable to palpate

Doppler Pulse
0-D- Absent
1-D-Present

Follow-up Schedule for

I.Risk Catergory	Return Visit
1. 0-0A	1Yr./PRN
2. 1-1a	6-9 months
3. 1B	3-6 months
4. 2-4	1-3 months

CODING FOR PURPOSE OF VISIT

a) Code the underlying disease 250.61
Choose 4th digit (6 neurological)
assign 5th digit 1 Type 1 or 2 Type 2
b) Code the manifestation 357.2 POLYNEUROPATHY

250.6 Neurological manifestation

250.7 Peripheral circulatory disorders

Problem List A-AI-C	#	PURPOSE OF VISIT (PRINT ONLY IN THIS SECTION; DO NOT ABBREVIATE)

PROBLEM LIST NOTES
STORE NOTE FOR PROB. #
REMOVE NOTE #

STORE NOTE FOR PROB. #

MEDICATIONS/ TREATMENT/ PROCEDURES/ PATIENT EDUCATION

RR#:
Sex:
Name:
Tribe:
SS#:
Community of Residence
Birthdate:
Facility:

Referral To:
NIVL Other
C-Ped

Return to Clinic
On
For

Provider Signature
Date

APPENDIX C

DIABETIC PERIPHERAL NEUROPATHY
SIGNS AND SYMPTOMS

1. Loss of sensation to monofillement (5.07), cutaneous pressure, temperature, or position sense

2. Loss of deep tendon reflexes

3. Paresthesia -(burning, prickling, tickling, tingling.)
   hyperesthesia -(Abnormal acuteness of sensitivity to touch or pain.)
   hypoesthesia-(Deminished sensitivity to touch or pain)

4. Anhidrosis-(Absence of sweating)

5. Callus formation - usually occurs over pressure points

6. Development of bony abnormalities:
   Charcot's joint [due to reabsorption, fracture, and collapse of the bone.]

7. Radiographic signs:
   Demineralization
   Osteolysis-softening, absorption & distribution of bony tissue.
   These radiographic findings may be difficult to distinguish from osteomyelitis.

8. In addition to sensation, peripheral neuropathy also affects muscle receptors. This leads to atrophy of muscle groups in the leg and foot. Muscle atrophy and disproportionate muscle tone in the feet causes cavus deformities and/or foot drop in extreme cases.

9. Neuro-osteo arthropathy is characterized by joint swelling and bone disruption and absorption with fractures.

APPENDIX D

DIABETIC PERIPHERAL VASCULAR DISEASE
SIGNS AND SYMPTOMS

1. Hair Loss — Mild to Moderate arterial
   Hypertrophic nails — insufficiency
   Decreased pulse

2. Intermittent Claudication — Moderate to Severe Ischemia
   Rest pain — Consider Non-Invasive Vascular Testing
   Absent pulses

3. Dependent rubor or
   elevation pallor — Clearly suggests limb threatening ischemia
   Tissue gangrene — (see section 7 and Appendix H)

4. Shiny appearance of skin

5. Loss of hair on feet and toes

6. Failure of a wound to respond to appropriate treatment

7. Calcification of blood vessels

8. Decreased venous filling time after elevation to 45 degrees for at least 30 sec.
   (Normal: < 20 sec.)

APPENDIX E

BASIC FOOT CARE EQUIPMENT LIST

1. DREMEL hand drill with variable speed control

2. Snap on sandpaper discs-course grit with snap on mandrel and toenail sanding bar.
   (For use with DREMEL drill) Recommended Vendor: Your local hardware store

3. Semmes-Weinstein Monofilaments, size 5.07

   Recommended Vendor: Research Design
   7320 Asheraft, Suite 103
   Houston, TX 77081
   (713) 995-8591

4. Straight edge nail clippers, 5" length

5. Tuning fork with 256 cycle

6. Derma Temp Infarred Scanner

   Recommended Vendor: Measurements, Inc.
   2946 Ponce De Leon
   New Orleans, Louisiana 70119
   Phone (504) 949-1192

7. The FWT Pressure Sensor
   310 Highdon
   Hot Springs, AR 71913

APPENDIX F: Patient Educational Handout

SHOES AND MORE

COMMON MISTAKES IN SHOE SELECTION:

1. Using a shoe which is inappropriate for an activity. Tennis shoes do not make good running shoes. High-heeled shoes should not be used for prolonged walking.

2. Buying shoes in bargain basement or outlet stores. The shoes are not always what you think they are!

3. Buying shoes through the mail. Many of these shoes never fit properly and cause foot injuries or just add to your "Closet collection."

SHOE WEAR

1. New shoes are stiff and need to be gradually broken in. To avoid problems wear new shoes for short time periods and add one hour or less each day thereafter. Check your feet after wearing new shoes for redness blisters or rubbing on your feet.

2. You should have two pairs of comfortable shoes that you can wear. It is recommended that you alternate wearing different pairs of shoes frequently to avoid problems and to prolong the life of the shoes.

3. Do not put insoles or pads into your shoes if there is not enough room. They may cause the shoes to be too tight which could result in blisters and pain.

WHEN TO BUY?

1. For the best results, buy your shoes during the latter part of the day. This is important because your feet have a tendency to spread and lengthen as the day progresses. Just by following this simple rule you can avoid a lot of frustration and save a considerable amount of money!

Adopted from Hunt GC, Fromherz, WA: Update on foot management. Durango, CO, 1987

APPENDIX F - (cont)

SELECTING THE BEST SHOE:

1. Shoes should fit the shape of the foot. Measure the patient's foot with a Brannock device to measure the length and width while the patient is setting. Besure to measure both feet because one foot might be longer or wider than the other.

2. Shoes should be purchased in the afternoon, if possible, when the feet are a little swollen. They should be comfortable at the time of purchase.

3. The upper material should be made of leather. Leather molds over time to the shape of the foot.

4. Laces, strap, or Velcro closure provide adjustment to minimize heel slippage. Heel height should be from 1 to 1 1/4 inches measured from the middle of the heel.

5. Neoprene crepe rubber soles provide about twice as much softness under the feet as leather.

6. A shoe of correct length should bend straight across at the ball of the shoe.

7. Shoes should be at least 1/2 to 1 inch from the longest toe and the end of the shoe.

8. The toe of the shoe should be as wide and slightly higher than the forefoot.

9. The shoes should be snug at the ball of the foot but not to tight.

10. A properly fitted shoe will fold slightly when the leather on top is pinched with the thumb.

11. Heel counter should fit snuggly around the heel but not enough to cause skin irritation.

Footwear that should not be worn when feet is insensitive:

1. Thongs can cause blisters between the toes.
2. Narrow toe shoes or boots will cause excessive pressure on the sides of the foot.
3. Plastic or vinyl uppers may cause foot pressure because the material will not stretch.

APPENDIX G

RISK AND MANAGEMENT CATEGORIES FOR DIABETIC FEET WITHOUT ULCERATION

LOW RISK

	MANAGEMENT
Has protective sensation* Has not had a foot ulcer. Does not have foot deformity.	Comprehensive foot exam once a year Patient education to include appropriate footwear selection.

HIGH RISK

CATEGORY I	MANAGMENT CATEGORY I
Does not have protective sensation. Has not had foot ulcer. Does not have foot deformity.	Comprehensive foot exam every 6 mos. Patient education.
CATEGORY II	**MANAGEMENT CATEGORY II**
Does not have protective sensation. Has not had a foot ulcer. Does have a foot deformity.	Comprehensive foot exam every 6 mos. Provider foot inspection every 3-4 mos. Full-contact molded insoles and extra-depth shoes. Patient education.
CATEGORY III	**MANAGEMENT CATEGORY III**
Has history of foot ulceration or amputation and/or vascular laboratory findings indicate very serious vascular disease**	Comprehensive foot exam every 6 mos. Provider foot inspection every 1-2 mos. Full-contact molded insoles and extra-depth shoes. Patient education.

*Protective threshold of sensation is lost if the patient can not feel Semmes-Weinstein monofilament 5.07 (10 grams).

**Very serious vascular disease for Category III is defined in Appendix 1.

APPENDIX H **Noninvasive Vascular Laboratory Services**

TYPE OF STUDY	**INDICATIONS**	****CONTRAINDICATIONS**
1. Lower extremity Arterial(LEA) With: A. Treadmill (Exercise Testing) B. Femoral Artery Evaluation	Rule out occlusive arterial disease. Evaluate leg pain, rest pain, and degree of Claudication. Prediction of amputation and lesion healing. Define functional aspect of disease. Evaluate patency of LE grafts. Baseline study.	TREADMILL: - Patients with history of cardiac disease and/or debilitating COPD -Inability to walk at the treadmills designated speed (i.e. plantar foot lesions, prosthesis, leg casts, elderly, etc.)
2. Upper Extermity Arterial (UEA)	Question of subclavin stenosis. Evaluate general symptoms of pain, numbness, aching in arms. Differentiation of vasospastic vs. Small vessel disease. Evaluation of subclavian or auxilliary graft surgery.	NONE
3. Digital Study (Upper)	Differentiate digital small vessel disease from vasospastic disease	NONE
4. Lower extremity Venous (LEV) (Impedance flow method)	SCREENING FOR DVT. Evaluation of unilaterial or bilaterial edema, not related to cardiac.	NONE

APPENDIX H - (cont)

TYPE OF STUDY	INDICATIONS	**CONTRAINDICATIONS
5. Upper Extremity Venous (UEV)	SCREENING for DVT. Evaluation of Unilateral or bilateral edema, not related to cardiac.	NONE
6. Cerebral Study Consists of: OPG's, cartoid phonoangiogram (CPA) and Doppler directional flow.	Asymptomatic cartoid bruits, Non-hemispheric cerebral ischemic symptoms. Baseline information after strokes, Transischemic attacks, or follow up a carotid endartoerectomy.	- Untreated Glaucoma - Eye Infetions - Communicable diseases of the eye/or acute or chronic conjunctivitis - Lens implants less than 2 years old - Allergy to opthalmic solution or lucite Products (eye cuffs) - DETATCHED Retina - Hemophilia/or other bleeders (i.e. DIABETIC RETINOPATHY). - Trauma to eyes within last 6 months NOTE: The Cerebral exam is a screening tool Only. More definitive tests, such as, Duplex Imaging are more detailed for diagnostic purposes.
7. Penile Study	Rule out vasculogenic impotence	- Penile discharge and/or untreated sexually transmitted diseases.
		**NO PATIENT PREPARATION is required prior to any of the studies.

*Equipment used in the CAIHF-NIV is Life Sciences Inc. The Automated Procedural Laboratory utilizes pneumatic blood pressure cuffs, 9.2 and 3.5 MHZ dopplers, CPA microphone and is computerized.

APPENDIX I

ABERDEEN AREA IHS DIABETES CONTROL PROGRAM
PATIENT AMPUTATION REGISTRY

Date of Report: ___/___/___

Patient's Name:_____ Service Unit:_____

Birth date: _____

Chart Number: _____

Sex: Male_____ Female_____

Date of Amputation:___/____/_____

Site of Amputation: (Check all that apply and circle if right (R) or left(L) side)

ABOVE KNEE_____	_____	R	L
BELOW KNEE_____	_____	R	L
AT THE ANKLE_____	_____	R	L
PARTIAL FOOT_____	_____	R	L
GREAT TOE_____	_____	R	L
OTHER TOE_____	_____	R	L
OTHER_____	_____	R	L

Reason for Amputation: (Check primary reason)

Trauma_____ Non-healing_____ Infection_____ Other_____

Does This Patient Have Diabetes? Yes_____ No_____

If Yes, Date of Diagnosis (Year minimum): ___/___/___

Reported By:

PHN_____ CHR_____ CHS_____ DCC_____ Other(Specify)_____

Please Return completed form to: Area Diabetes Consultant
Aberdeen Area Indian Health Service
Federal Building, Room 309
115 4th AVE., S.E.
Aberdeen, South Dakota 57401

Appendix J FORMS

IHS-504
(8/91)

U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Public Health Service
Indian Health Service

DIABETES PATIENT EDUCATIONAL NEEDS ASSESSMENT

(TO COMPLETE THIS FORM SEE INSTRUCTIONS ON PAGE 4)

DATE OF DIAGNOSIS: _____

FAMILY MEMBERS WITH DIABETES: ☐ Parents ☐ Brother/Sister ☐ Grandparents ☐ Grandchildren ☐ Spouse ☐ Aunts/Uncles ☐ Children

METHOD OF TREATMENT

Do you follow a special diet? ☐ Yes ☐ No If yes, explain: _____

Is a nutritional assessment done? ☐ Yes ☐ No Date: _____

	DATE	DRUG NAME	DOSAGE/DAY	SIDE EFFECTS
DIABETES MEDICATIONS:				
OTHER MEDICATIONS:				

EXERCISE	DATE	YES	NO	TYPE OF ACTIVITY	HOW OFTEN?	HOW LONG DO YOU EXERCISE?

MONITORING

	DATE	YES	NO
Do you check your Blood Sugar at home?			
Would you like to learn?			

Type _____ Frequency _____ Review of Log _____

Average Range of BS: _____

	DATE	LEVEL	DATE	A_1C LEVEL
FBS				
RBS				

FACTORS AFFECTING LEARNING

How do you like to learn new information:

☐ Reading ☐ Slides/Movies ☐ Doing things ☐ Have someone show you

☐ Listening ☐ Talking/asking questions ☐ With a group ☐ One on One

PATIENT IDENTIFICATION

FACTORS INFLUENCING EDUCATION			
DATE	YES	NO	
			Do you have a family member or friend who helps you with your diabetes?
			Do you want your support person with you? Who?
			Employed?
			Do you smoke? How much?
			Do you drink Alcohol? How much? What kind?
			Stresses Identified
			a. Emotional
			b. Financial
			c. Family
			d. Other, i.e. transportation, indoor plumbing at home
How many people live in your house?			
Who does most of the cooking in your home?			

FACTORS INFLUENCING EDUCATION				
(Check Yes or No and explain if needed.)				
	DATE	YES	NO	
VISION PROBLEMS				
HEARING PROBLEMS				
MOBILITY PROBLEMS				
LOSS OF SENSATION				
COMPLICATIONS OF DM				
ENGLISH PRIMARY LANGUAGE SPOKEN				

HEALTH BELIEFS			
DATE	YES	NO	
			Do you feel Diabetes can be prevented?
			Do you believe your religious/spiritual beliefs affect your health?
			Do you believe that no matter what you do, if you are going to get sick, you will?

Do you feel your health is: ☐ poor ☐ good ☐ excellent

Date _____ Weight _____

Do you believe you are: ☐ too fat ☐ too thin ☐ just right

What would you like to weigh? _____

How do you feel about having diabetes?

☐ Angry	☐ Annoyed	☐ Afraid	☐ Depressed
☐ Guilty	☐ Satisfied	☐ Worried	☐ No Way
☐ Denial	☐ Always Tired	☐ Sometimes Tired	

How much energy do you usually have? ☐ Low ☐ Medium ☐ High

IHS-504 (PAGE 3)
(8/91)

CURRICULUM

Check the topics you feel you need to learn more about so you can control you diabetes.

- ☐ What is Diabetes
- ☐ Feelings about having Diabetes
- ☐ Coping with Diabetes at home
- ☐ Nutrition
- ☐ Exercise
- ☐ Medications
- ☐ Monitoring Blood Glucose
- ☐ Low blood sugar
- ☐ High blood sugar
- ☐ High blood pressure
- ☐ Smoking
- ☐ Retinopathy
- ☐ Periodontal Disease
- ☐ Neuropathy
- ☐ Nephropathy
- ☐ Illness
- ☐ Complications
- ☐ Personal Care
- ☐ Responsibilities of care
- ☐ Use of Health Care Systems
- ☐ Community Resources
- ☐ Alcohol and Diabetes
- ☐ Heart Problems
- ☐ Sexual Problems
- ☐ Foot Care
- ☐ Gestational Diabetes
- ☐ Pre-Preg Counseling
- ☐ Diabetes & Pregnancy
- ☐ Other:

DATE	IDENTIFIED NEED	PLAN OF ACTION	DATE	EVALUATION/OUTCOME

PATIENT IDENTIFICATION

DATE	REFERRALS	DATE OF FOLLOW-UP	PROVIDER SIGNATURE	INITIALS

INSTRUCTIONS

The Diabetes Patient Educational Needs Assessment form (IHS-504) will be filed in the "Diabetes" section (IHS-677-1) of the patient's chart. This assessment form can be filled out by both the health care providers and/or the patient. The assessment form can be completed during one clinic visit or over a period of several clinic visits. The needs assessment should be updated yearly or as needed.

The following is a list of abbreviations that are used in the form:

BS = Blood Sugar
FBS = Fasting Blood Sugar
RBS = Random Blood Sugar
A_1C = Glycosylated Hemoglobin Test

*U.S. Government Printing Office: 1992 — 322-160/69053

IHS-525
(1/94)

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Indian Health Service

DIABETES EDUCATION FLOWSHEET

(See back page for instructions.)

NUTRITION CODE: DM-N

Lesson Title	LEARNER OBJECTIVES	Date	Evaluation	Initial	Date	Evaluation	Initial
	State the importance of regular meals						
Eat Less Fat	Identify foods high in fat in his/her diet						
	State steps he/she will take to reduce fat in his/her diet		See Prog Notes			See Prog Notes	
Eat Less Food	Identify foods he/she consumes in large portions						
	State steps he/she can follow to reduce food intake		See Prog Notes			See Prog Notes	
Eat Less Sugar	Identify foods high in sugar in his/her own diet						
	State steps he/she will take to reduce sugar intake		See Prog Notes			See Prog Notes	
	Demonstrate label reading knowledge for sugars and fats						

EXERCISE CODE: DM-EX

Lesson Title	LEARNER OBJECTIVES	Date	Evaluation	Initial	Date	Evaluation	Initial
	State the need for regular activity to achieve and/or maintaining desirable body composition						
	State that regular exercise is important for good health and diabetes management						
	State the role of activity and exercise in control glucose and lipid levels						
Excercise and Diabetes	State frequency and duration of exercise of greatest benefit						
	List obstacles/solution to adherence to his/her activity program		See Prog Notes			See Prog Notes	
	Describe proper foot wear when exercising						
Exercise and Diabetes	Describe personal exercise plan		See Prog Notes			See Prog Notes	

PATIENT IDENTIFICATION

Initials	Signatures

DIABETES EDUCATION FLOWSHEET

IHS-525
(1/94)

GENERAL DIABETES CODE: DM-I

Lesson Title	LEARNER OBJECTIVES	Date	Evaluation	Initial	Date	Evaluation	Initial
American Indians	Describe feelings/symptoms when blood sugar is high						
	State that blood sugar control can reduce risk of complications						
	Describe steps family members can take to reduce risk for developing diabetes						
Health Care	State that diabetes is a chronic disease that needs to be monitored for complications						
	State need for current immunization status						
Feeling	Verbalize his/her feelings about having diabetes						
Blood Glucose	State the reason for self blood glucose monitoring						
	Name 2 things that can affect blood sugar level						
Treatment	Name medication therapy if blood sugar is uncontrolled by diet and exercise alone						
	Explain that medication is not an alternative to diet and exercise						
Sick Days	State the need to take insulin or pills when sick						
	Name 3 food sources he/she should eat/drink when sick						
Medicine	Demonstrate steps in insulin administration						
	Describe proper storage, care, and disposal of medicine and supplies						
	State name, dose, and time to take pills/insulin						

Initials	Signatures	Initials	Signatures

DIABETES EDUCATION FLOWSHEET

IHS-525
(1/94)

COMPLICATIONS: DM-C

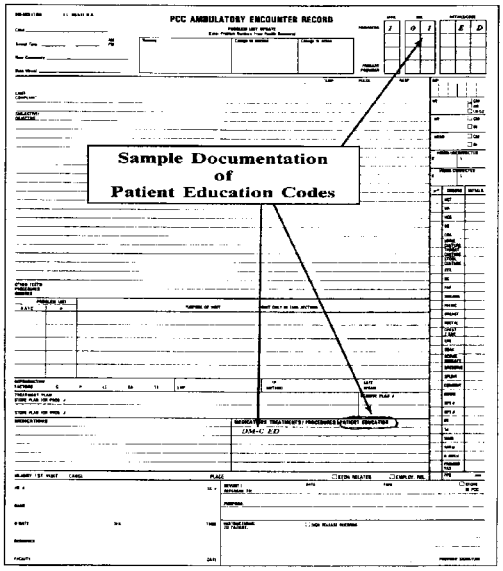
Lesson Title	LEARNER OBJECTIVES	Date	Evaluation	Initial	Date	Evaluation	Initial
Complications	State the importance of good control in preventing complications						
	State 3 routine tests which he/she should undergo each year to screen for complications						
Footcare	Explain why it is important to do a self foot check daily or weekly (give a specific amount)						
	Demonstrate proper self care examination of feet						
BP	Identify 2 complications that may develop because of uncontrolled blood pressure						
	State that weight loss can help control blood pressure and blood sugar						
Eye	State the importance of control of blood sugar and blood pressure to delay retinopathy						
	Identify the need for a yearly dilated eye exam						
Teeth	State two actions which make up proper dental care						
	State the 2 signs of gum disease						
Heart	List 2 signs or symptoms that develop in the heart and blood vessels as a result of high blood sugars						
	Describe 2 signs and symptoms of neuropathy						
Kidney	State 2 conditions that may cause damage to the kidneys						
Women's Health	State that BS control reduces the risk of vaginal infection and/or UTI						
	State that high BS affects the positive outcome for the mother and infant						
Men's Health	State problems related to sexual function for men						

Initials	Signatures	Initials	Signatures

IHS-525
(1/94)

DIABETES EDUCATION FLOWSHEET

The purpose of this flowsheet is to provide learner objectives for diabetes education. It also provides a format for documentation and evaluation of diabetes education. The flowsheet will facilitate data collection for audit purposes.

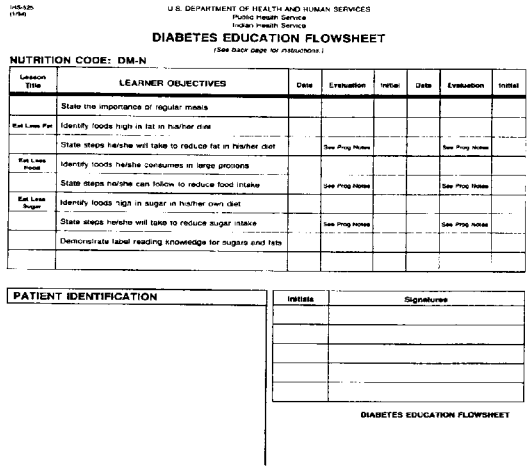


PCC

The education should be documented using the following steps:

1. Log onto the PCC form using the sign-in box in the upper right-hand corner.
2. Circle "Patient Education" in the section marked "Medication/Treatment/Patient Education."
3. Select the appropriate code and enter it, e.g. DM-C followed by a comma (,).
4. Evaluate the patient's level of understanding and enter as:

   Good, Fair, Poor, Refused, Group
5. Initial your entry.


IHS-525
(1/94)

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Indian Health Service

DIABETES EDUCATION FLOWSHEET
(See back page for instructions.)

NUTRITION CODE: DM-N

Lesson Title	LEARNER OBJECTIVES	Date	Evaluation	Initial	Date	Evaluation	Initial
	State the importance of regular meals						
Eat Less Fat	Identify foods high in fat in his/her diet						
	State steps he/she will take to reduce fat in his/her diet		See Prog Notes			See Prog Notes	
Eat Less Protein	Identify foods he/she consumes in large portions						
	State steps he/she can follow to reduce food intake		See Prog Notes			See Prog Notes	
Eat Less Sugar	Identify foods high in sugar in his/her own diet						
	State steps he/she will take to reduce sugar intake		See Prog Notes			See Prog Notes	
	Demonstrate label reading knowledge for sugars and fats						

PATIENT IDENTIFICATION	Initials	Signatures

DIABETES EDUCATION FLOWSHEET

Flowsheet

The education should be documented using the following steps:

1. Identify who you are by putting your initial and signature on the bottom right of the flowsheet.
2. Locate on the flowsheet the objective(s) taught. (If you need more, see curriculum.)
3. In the date column, enter the date.
4. Evaluate the patient's level of understanding and enter as:

   Good, Fair, Poor, Refused, Group
5. Initial your entry.

** If you want to be more specific, use the diabetes curriculum codes.*

DIABETES EDUCATION FLOWSHEET

GPO : 1994 O - 152-862

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